

WHAT IS CLAIMED IS:

1. A plasmid capable of expressing a heterologous protein in a plant that
5 encodes bovine lysozyme.

2. The plasmid of claim 1 comprising SEQ ID NO:1.

3. The plasmid of claim 1 or 2 having the sequence SEQ ID NO:3.

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4. The plasmid of claim 3 identified as ATCC Dep. No. PTA-2599.

5. A recombinant RNA plant virus comprising a nucleotide sequence
encoding bovine lysozyme.

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6. The plant virus of claim 5 comprising SEQ ID NO:1.

7. An RNA molecule comprising:

(a) a first viral subgenomic promoter;

(b) a second viral subgenomic promoter; and

(c) a bovine lysozyme coding sequence under control of either the
first or the second subgenomic promoter.

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8. The RNA molecule of claim 7 wherein the coding sequence is SEQ ID
25 NO:1.

9. A recombinant tobamovirus comprising a nucleotide sequence encoding
bovine lysozyme.

10. The tobamovirus of claim 9 wherein the lysozyme coding sequence is
SEQ ID NO:1.

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11. A method of producing bovine lysozyme, comprising:
- (a) infecting a host plant with an RNA plant virus comprising a nucleotide sequence encoding bovine lysozyme;
 - (b) allowing the virus to infect the plant systemically;
 - (c) harvesting plant material; and
 - (d) isolating from said harvested plant material bovine lysozyme,
- thereby producing said bovine lysozyme.

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42202 New Application